

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A wavelength selection module comprising:

wavelength selecting means for inputting a light, multiplexing lights of a plurality of different wavelengths, and selecting and outputting lights of the plurality of wavelengths other than a reference light in accordance with a control signal applied from an external circuit; and

demultiplexing means for demultiplexing and outputting each wavelength of the output lights of said wavelength selecting means.

2. (original) The wavelength selection module according to claim 1, further comprising means for inputting output lights of said demultiplexing means and outputting lights of unwanted wavelengths through an attenuation process.

3. (original) The wavelength selection module according to claim 1, wherein the wavelength selection means is an acousto-optical tunable filter (AOTF).

4. (original) The wavelength selection module according to claim 3, wherein the AOTF includes means for selecting a light of the wavelength corresponding to the frequency of an RF signal applied to an inter digit transducer through an RF signal input port.

5. (currently amended) A wavelength selection module comprising:

wavelength selecting means for selecting and outputting a plurality of wavelengths other than a reference light from an input light in accordance with an external control signal;

an optical filter including demultiplexing means for demultiplexing output light of said wavelength selecting means into lights of a plurality of wavelengths;

reference light source means for generating a reference light for said filter; and

multiplexing means for multiplexing input light and said reference light and inputting the multiplexed light to said wavelength selecting means.

6. (original) The wavelength selection module according to claim 5, wherein said demultiplexing means includes monitor output and control signal for controlling said wavelength selecting section when the light of the wavelength of said reference light source is outputted to said monitor output and a control signal for controlling said wavelength selecting section based on the wavelength of said reference light source are controlled.

7. (original) The wavelength selection module according to claim 6, wherein said reference light source generates lights of a plurality of wavelengths, a plurality of wavelengths demultiplexed by said demultiplexing means being respectively outputted to said monitor output, the control signal for controlling said wavelength selecting means when the light of the wavelength of said reference light source is outputted to said monitor output and the control signal for controlling said wavelength selecting means being based on the selected wavelength of said reference light source.

8. (currently amended) A wavelength selection module comprising:

wavelength selecting means for selecting and inputting lights of a plurality of different wavelengths other than a reference light;

branching means for branching output of said wavelength selecting section to a first light and a second light;

first filter means for inputting said second light and selectively transmitting light of the particular wavelength; and

control means for adjusting a relationship between a control signal applied to said wavelength selecting means and the selected wavelength on the basis of said control signal, output of said first filter and transmitting wavelength of said filter.

9. (original) The wavelength selection module according to claim 8, wherein said control means includes means for controlling said control signal to continuously select the light selectively transmitted through one of said first and second filter with said wavelength selecting means.

10. (original) The wavelength selection module according to claim 8, wherein said control means includes means for controlling an output of the light transmitted selectively with one of said first and second filters to said first light by controlling output of said control signal corresponding to the light selectively transmitted by said first or second filter.

11. (original) The wavelength selection module according to claim 8, wherein said control means includes a third filter for inputting the first light and attenuating the wavelengths of lights selectively transmitted by said first or second filter.

12. (currently amended) A wavelength selection module comprising:

reference light source means for providing a constant output wavelength;

multiplexing means for multiplexing input light including lights of a plurality of different wavelengths and output light of said reference light source;

wavelength selecting means for inputting output light of said multiplexing means and selecting and outputting lights of a plurality of wavelengths other than the reference light in accordance with an external control signal;

branching means for branching output of said wavelength selecting means into a first light and a second light;

a first filter for inputting said second light and selectively transmitting light of the wavelength of output light from said reference light source; and

control means for adjusting a relationship between the control signal applied to said wavelength selecting means and the selected wavelength in accordance with said control signal, output of said first filter and wavelength of said reference light source.

13. (original) The wavelength selection module according to claim 12, wherein said control means includes means for controlling said control signal to continuously select the light selectively transmitted through one of said first and second filter with said wavelength selecting means.

14. (original) The wavelength selection module according to claim 12, wherein said control means includes means for controlling an output of the light transmitted selectively with one of

said first and second filters to said first light by controlling output of said control signal corresponding to the light selectively transmitted by said first or second filter.

15. (original) The wavelength selection module according to claim 12, wherein said control means includes a third filter for inputting the first light and attenuating the wavelengths of lights selectively transmitted by said first or second filters.

16. (original) A wavelength selection module comprising:

first and second reference light source means for outputting a constant output wavelength;

multiplexing means for multiplexing input light including lights of a plurality of different wavelengths and output lights of said first and second reference light source means;

wavelength selecting section for inputting output light of said multiplexing means and selecting and outputting lights of a plurality of wavelengths in accordance with an external control signal;

branching means for branching output of said wavelength selecting means to the first to third lights;

first filter means for inputting said second light and selectively transmitting light of the output light wavelength of said first reference light source;

second filter means for inputting said third light and selectively outputting light of the output light wavelength of said second reference light source; and

control means for adjusting a relationship between the control signal applied to said wavelength selecting means and the selected wavelength based on the relationship among said

control signal, output of said first filter and wavelength of said first reference light source and the relationship among said control signal, output of said second filter and wavelength of said second reference light source.

17. (original) The wavelength selection module according to claim 16, wherein said control means includes means for controlling said control signal to continuously select the light selectively transmitted through one of said first and second filters with said wavelength selecting means

18. (original) The wavelength selection module according to claim 16, wherein said control means includes means for controlling an output of the light transmitted selectively with one of said first and second filters to said first light by controlling output of said control signal corresponding to the light selectively transmitted by said first or second filter.

19. (original) The wavelength selection module according to claim 16, wherein said control means includes a third filter for inputting the first light and attenuating the wavelengths of lights selectively transmitted by said first or second filter.

20. (currently amended) A method of effecting wavelength selection comprising:

inputting a light, multiplexing lights of a plurality of different wavelengths, and selecting and outputting lights of the plurality of wavelengths other than a reference light with a wavelength selecting means in accordance with a control signal applied from an external circuit; and

demultiplexing and outputting each wavelength of the output lights of said wavelength
selecting means with demultiplexing means.